

**Amendments to the Claims:**

*This listing of claims replaces all prior versions, and listings, of claims in the application:*

1. (CURRENTLY AMENDED) A hybrid fiber coax (HFC) network having network elements operable for communicating telephony, data, and video signals with customer-premises equipment of a given subscriber, the HFC network comprising:

    a service, design, and inventory (SDI) database operable for storing data indicative of the configuration of the network elements and customer-premises equipment of subscribers, for storing data indicative of assigned capacity of the network elements, and for storing data indicative of the physical and logical connections between the network elements themselves and with the customer-premises equipment of the subscribers; and

    an online provisioning application link (OPAL) operable with the SDI database to access the stored data for automatically, without manual intervention, provisioning network elements with the customer-premises equipment of a given subscriber based on the configuration of the network elements and the customer-premises equipment of the given subscriber and based on the assigned capacity of the network elements such that the provisioned network elements and the customer-premises equipment of the given subscriber are physically and logically connected in order to enable communication of telephony, data, and video signals between the HFC network and the customer-premises equipment of the given subscriber;

the network elements include a host digital terminal (HDT) for communicating the telephony signals, a cable modem termination system (CMTS) for communicating the data signals, and video equipment for communicating the video signals;

    the SDI database is operable with the OPAL in order to automatically update, without manual intervention, the stored data indicative of the configuration of the network elements and the customer-premise equipment of the subscribers, the assigned capacity of the network elements, and the physical and logical connections between the network elements themselves and with the customer-premises equipment of the subscribers to account for the

automated provisioning of the provisioned network elements with the customer-premises equipment of the given subscriber.

2. (ORIGINAL) The HFC network of claim 1 further comprising:  
an HFC network manager for monitoring status of the network elements and the customer-premises equipment, for controlling configuration of the network elements and the customer-premises equipment, and for monitoring the configuration of the network elements and the customer-premises equipment.

3. (PREVIOUSLY PRESENTED) The broadband network of claim 2 further comprising:

a fault manager having an alarm visualization tool operable with the HFC network manager and the SDI database for generating visual displays of the status and configuration of the network elements and the customer-premises equipment of the subscribers.

4. (PREVIOUSLY PRESENTED) The HFC network of claim 3 further comprising:

a trouble ticket system operable with at least one of the HFC network manager and the fault manager for generating trouble ticket alerts in response to improper status of at least one of the network elements and the customer-premises equipment.

5. (ORIGINAL) The HFC network of claim 4 wherein:

the HFC network manager updates the improper status of the at least one of the network elements and the customer-premises equipment to a proper status after the trouble ticket alert has been addressed.

6. (ORIGINAL) The HFC network of claim 3 further comprising:

a trouble ticket system operable with at least one of the HFC network manager and the fault manager for generating trouble ticket alerts in response to improper configuration of at least one of the network elements and the customer-premises equipment.

7. (PREVIOUSLY PRESENTED) The HFC network of claim 6 wherein:  
the HFC network manager updates the improper status of the at least one of the  
network elements and the customer-premises equipment to a proper status after the trouble  
ticket alert has been addressed.

8. (CANCELLED)

9. (CURRENTLY AMENDED) The HFC network of ~~claim 8~~ claim 1  
wherein:

the network elements further include a fiber optics node connected at one end  
to the HDT, the CMTS, and the video equipment by a fiber optics network and connected at  
the other end to the customer-premises equipment by coax.

10. (ORIGINAL) The HFC network of claim 1 further comprising:  
an order manager operable with the OPAL for monitoring the provisioning of  
HFC network elements with customer-premises equipment by OPAL.

11-17. (CANCELLED)